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ABSTRACT

This study examined the beliefs of six Virginia teachers (two elementary and four middle) about redesigning instruction to meet new state standards of learning through action research. It focused on how teachers reconsidered current teaching practices in order to reconcile the demands of higher stakes learning with progressive ideas about curriculum, instruction, and assessment. The participants undertook action research projects in which they redesigned instructional units that incorporated some of the new standards. In doing so, each participant used an assessment tool, such as a rubric, checklist, or portfolio. Data for qualitative analysis were gathered from the action research projects, participants' written reflections, focus groups, and a 6-month followup survey of participants. Results showed that participants' students gained a more explicit understanding of the connection between learning and assessment, took responsibility for their learning, and received improved instruction. The participants gained autonomy and confidence for redesigning instruction, reached a higher level of problem- solving ability, and learned to use classroom data more effectively. Effects of the participants' action research on administrators and other teachers, however, were limited. (Contains 13 references.) (Author/SM)

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Teachers' Beliefs about Redesigning Instruction to Meet New Standards Through Action Research

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Abstract

This study examined the beliefs of 6 teachers in Virginia about redesigning instruction to meet new state standards of learning through action research. It focused on how teachers reconsidered current teaching practices in order to reconcile the demands of higher stakes learning with progressive ideas about curriculum, instruction, and assessment. Two were elementary teachers and four were middle school teachers. The participants undertook action research projects in which they redesigned instructional units that incorporated some of the new standards. In doing so, each participant used an assessment tool, such as a rubric, checklist, or portfolio. Data for qualitative analysis were gathered from the action research projects, written reflections, focus groups, and a six-month follow-up survey. Results showed that students gained a more explicit understanding of the connection between learning and assessment, took responsibility for their learning, and received improved instruction. The participants gained autonomy and confidence for redesigning instruction, reached a higher level of problem-solving ability, and learned to use classroom data more effectively. Effects of the participants' action research on administrators and other teachers, however, were limited.

Teachers' Beliefs about Redesigning Instruction to Meet New Standards through Action Research

PROBLEM

This study examined teachers' beliefs about redesigning their instruction to meet new state standards of learning. As they implemented the new instruction, the teachers also used an action research model to reflect on the effects of the redesigned instruction on themselves and on their students. The teachers in the study were six experienced practitioners who taught in elementary and middle schools in southeastern Virginia. Like many states today, the State of Virginia has aggressively sought to establish a statewide curriculum framework that is closely aligned with its testing and accountability systems for all public schools (see, e.g., Porter, 1999). Thus far, the State of Virginia Standards of Learning (SOL) have been received by teachers as a mixed blessing. On one hand, the SOL codify exactly what teachers should cover in their particular subject areas and grade levels. On the other, curriculum frameworks have been found to stifle many teachers' sense of autonomy and desire to try new methods (Thomas, 1997).

The teachers in this study hoped their action research projects would shed some light on how they would rethink their current teaching practices in order to reconcile the demands of higher stakes learning with progressive ideas about curriculum, instruction, and assessment. Hence, this study was guided by the following questions: (1) How do teachers design, implement, and assess quality instruction in a current climate of higher standards and expectations for learning? (2) What knowledge,

skills, and attitudes do they draw from in order to make important connections between curriculum, instruction, and assessment? (3) What are the benefits to both teachers and their students who are actively engaged in making these connections through an action research model?

THEORETICAL PERSPECTIVE

Zeichner (1983) and Goodman (1986) both demonstrated that some teachers hold beliefs which enable them to make substantive decisions for altering traditional classroom practice. These "proactive" teachers are disposed to influence changes in education, especially if they employ reflective practices and receive appropriate professional support for their efforts. These teachers tend to participate more fully in the professional aspects of teaching, such as developing support systems among other progressive individuals within the greater school community and writing proposals for curriculum change, to mention a few.

Miller (1988) discussed a three-fold process in which lead teachers participated in curriculum writing, teacher-led staff development, and action research. These experiences enabled lead teachers to become "major decision makers in the educational process as well as implementers for programs" (p. 172).

Action research has been cited as "a way of meeting the investigative needs of the educational community" (Oja & Smulyan, 1989, p.1). Discussions by teachers about action research "can provide the kind of environment which will encourage adult development in schools. These discussion frequently draw on teachers's deeply held values about students, teaching, and curriculum and have a moral/ethical dimension that encourages teachers to think in more encompassing ways (p. 141).

However, the current pressure on teachers for higher stakes learning and testing has been cited as one of the conditions that compound the problem of effecting change in schools. Although teachers weight differently the broad spectrum of personal, social, economic, and academic goals from the way parents and the public may do so, they are still told to pay attention to test scores (Goodlad, 1998). This press for high test scores can force even experienced teachers to forego taking chances with innovative approaches to curriculum, instruction, and assessment. Thus, by examining the beliefs of experienced teachers about the process of redesigning instruction in a milieu of high standards, insights may be gained into ways to better educate and support them for this reality of present day teaching.

METHOD

Participants

The participants in this study were six female teachers (5 white, 1 African-American) who had 6 to 20 years' teaching experience in schools in southeastern Virginia. Two were elementary teachers (grades 1 and 3) and four were middle school teachers (two social studies teachers, one English teacher, and one learning disabilities resource teacher). At the time of the study (1997-98), they were degree candidates in an advanced graduate degree program in Curriculum and Instruction in which the investigator served as the academic advisor. They were also part of a cohort of 22 teachers who engaged in individual action research projects as a culminating experience for the degree program. The six participants were chosen for this study because their action research focused on redesigning instruction to meet

new standards.

Prior to doing the action research, the participants had completed graduate courses in curriculum, instruction, and assessment that examined the work of current experts in the field. These included, among others, Heidi Hayes Jacobs (Interdisciplinary Curriculum), Fenwick English (Knowing What to Teach and Test), and Richard Stiggins (Classroom Assessment). A Practicum in Curriculum and Instruction provided the participants with directions on how to use an action research model for self-renewal (Calhoun, 1994). Indepth knowledge about action research, including certain aspects of qualitative research analysis, complemented what the participants had studied in traditional graduate research courses, such as Tests and Measurements (Quantitative Methods I) and Research Design (Quantitative Methods II).

During implementation of their action research projects (approximately two months), the participants met every two weeks at a local school with the other graduate students from the cohort and the investigator, who served as a peer coach. These meetings provided a forum for discussing their work in progress and for obtaining feedback from their peers. Formal reports of their projects were submitted at the end of the course.

Action Research Projects

Each participant in this study sought to redesign a unit of instruction that incorporated some of the SOL for her grade level and subject area. The participants used an action research model in which they (1) planned an instructional strategy that was new for them (i.e., a redesigned unit); (2) implemented the strategy (including new tools for assessing the strategy, such as

portfolios, rubrics, and checklists); and (3) used the results of the implementation to guide future plans for connecting curriculum, instruction, and assessment in their classrooms. The action research projects were conducted with a variety of students (gifted, at-risk, special needs, and regular education) and in different settings (2 elementary classrooms, 3 regular middle school classrooms, and one middle school LD resource room).

The connecting factor among the action research projects was that the participants purposively introduced a new assessment tool to their students in stages during the learning process, while at the same time incorporating selected SOL. This strategy, which was a departure from the participants' usual approach to instruction and assessment, enabled their students to gain familiarity with the assessment tools as part of the learning process.

Topics for the action research projects were the following: (1) a comparison of student achievement using teacher-made tests and portfolio assessments in two first grade science classes; (2) improving reading and writing in Grade 3 through use of a Word Wall; (3) students generating questions to incorporate higher order thinking in a Grade 8 language arts classroom; (4) effectiveness of using rubrics in a Grade 8 Social Studies classroom; (5) effects on student engagement by using portfolios in a middle school LD resource classroom; and (6) differentiation of instruction to meet the needs of gifted learners in a Grade 7 mixed ability social studies classroom.

Data

Data for this study were drawn from (1) the participants' action research reports, (2) written reflections on the experience

of engaging in action research, (3) a focus group on what the participants learned when they redesigned their instruction, and (4) a six-month follow-up survey. Survey questions focused on the participants' beliefs about (1) effects of redesigning instruction on themselves and their students; (2) alternative assessment issues; (3) knowledge, skills, and attitudes used for redesigning instruction; and (4) implications for building a professional culture in schools. Data were analyzed by means of a file-folder method (Merriam, 1988) to create categories across the cases of the six participants. Member checks and peer debriefers were used to ensure triangulation of the data (Lincoln & Guba, 1985).

RESULTS

Although limited by its sampling method and dependence on self-report, this study sheds some light on the interplay of three areas that work together toward school reform, i.e., increasing student academic achievement, ensuring teacher development, and building a professional culture in schools (Darling-Hammond, 1996). First, by implementing redesigned instructional units, the participants helped increase academic benefits to their students. Second, by using action research as a vehicle for implementing the units, the participants received personal and professional benefits toward teacher development. Third, prospects for helping to build a professional culture in schools were small due to limited opportunities in which the participants shared their results, misunderstandings in general about action research, and the disconnection between the participants' advanced teacher education program and staff development initiatives in local schools.

Results for Students

Five of the six participants incorporated State of Virginia SOL for their grade level and subject areas into their redesigned instruction. (The Grade 8 Social Studies teacher did not use SOL because they were not available at the time she did her project. Instead, she incorporated district requirements.) As stated above, each participant utilized an assessment tool, such as a portfolio, rubric, or checklist, that helped students gain familiarity with assessment during the learning process. This was a new teaching approach for the particpants, who wanted to test for themselves current ideas for assessment they had learned in graduate school.

As a result of using this approach, the participants believed their students (1) gained an understanding of the connection between learning and assessment, (2) became empowered by their ability to learn in new and different ways, (3) took responsibility for their own learning, (4) connected their classroom learning to real-world applications, and (5) received more quality instruction.

Although increasing students' test scores was not the primary focus of their projects, two of the participants did observe student gains in end of unit testing. Specifically, the eighth grade language arts teacher ("students generating questions to incorporate higher order thinking") observed that her students increased their reading comprehension test scores by 10 percent and their novel test scores by 35 percent. The seventh grade social studies teacher ("differentiation of instruction") observed that her high ability learners increased their end of unit test scores by an average of 14 percent and her gifted learners by an

average of 18 percent. Gains made by the social studies students were also proven to be significant by means of a t-test ($p<.01$).

Results for Teachers

In their efforts to redesign instruction to meet new standards, the participants used a deliberative approach toward curriculum, instruction, and assessment. This deliberative approach focused primarily on using tools for student self-assessment during the learning process. As a result, participants helped their students make important connections in their learning, and, assumedly, achieved some of the alignment that is expected through the use of curriculum frameworks.

By using an action research model as a means for implementing their redesigned instruction, the participants engaged in reflective teaching practice. As a result, the participants believed they (1) gained autonomy and confidence for redesigning instruction; (2) were affirmed in their abilities to teach particular student populations (e.g, gifted, learning disabled, at-risk, and mixed ability); (3) reached a higher level of thinking and problem-solving ability; (4) became partners with their students in the assessment process; and (5) saw the importance of using data for themselves and their students in the classroom.

However, redesigning their instruction while at the same time incorporating new standards gave the participants some concern. In general, the participants equated quality teaching and learning with the availability of time for instruction. They believed the current pressure on teachers to complete or cover required material lessened the time that should be used for more focused instruction, as experienced in their redesigned units.

For example, the seventh grade social studies teacher wrote, "Hands on learning is not stressed in the SOL and its testing." She believed, though, that the SOL did "guide" her in constructing her redesigned unit. One year later, she felt more comfortable using the SOL combined with the new teaching strategies from her action research project.

The follow-up survey in this study also provided reflections about the knowledge, skills, and attitudes the participants employed for their projects. First, a deep knowledge of subject matter, including the SOL and school district standards, were utilized by the participants. This knowledge of subject matter was combined with a deep understanding of the learning characteristics and needs of their particular students.

Next, the participants exercised skills for constructing and implementing new tools for the assessment of student learning that went beyond the pencil and paper tests they typically used. These tools, which included checklists, rubrics, and portfolios, enabled the participants to focus on the process of teaching and learning simultaneously. The new assessment tools helped them and their students make connections between curriculum, instruction, and assessment that were previously hidden. The new assessment tools also enabled them to become more explicit in communicating goals and expectations to their students and in differentiating instruction as needed.

Finally, the participants firmly believed that teaching and learning is a process that can be improved over time in order to benefit students with varying characteristics and needs. Through their willingness to learn and implement new ways of teaching, the participants demonstrated their commitment to their students.

This commitment was based on having a strong sense of responsibility for students' academic success and a disposition that enabled them to reflect upon their successes and failures as teachers.

Results for Building a Professional Culture in Schools

The follow-up survey also asked the participants to reflect on the extent to which members of their professional communities were influenced by the results of their action research projects. On the whole, influences on other teachers and administrators were small. The participants shared the results of their respective projects with their administrators, grade level and/or subject area teams. The two participants who taught middle school social studies presented their results at a regional middle school conference.

On the whole, the participants believed that other professionals were more interested in the results of action research for students, not for teachers. They felt their administrators were "thankful" and "pleased" they had taken the time to actively improve their instruction, especially when it was connected to a schoolwide initiative. For example, as a result of the third grade teacher's action research ("improving reading and writing through use of a Word Wall"), the principal of her school decided to abandon a spelling program that was found to be ineffective. This was the only result cited by the participants that actually made a change in a schoolwide program.

The participants believed that administrators and other teachers,especially, were not interested in doing action research because it was perceived as taking too much time. In the case of the middle school LD resource teacher who employed portfolios with

her students, she found that administrators and other teachers were "not able to connect with the action research component." She went on to say, "There is a lack of true understanding of teacher educators and action research. One thing [other teachers] do like is the results and how it meets the school system's guidelines for [new standards]."

The first grade teacher summed up the situation when she wrote:

> I believe that the focus in public schools today is how to improve test scores, not how to improve instruction. Teachers and administrators are under so much pressure to raise scores, they have little time and less interest in hearing what research has to say about student achievement. I'm convinced that the research would provide the answers to their dilemma if they only took the time to take their eyes off the "numbers."

DISCUSSION AND IMPLICATIONS FOR TEACHER EDUCATION

"The issues identified by teachers tend to be those associated with taking defensible action that has a direct and usually immediate impact on children" (Feldman & Atkin, 1995, p. 132). This seems very much to be the case for the six teachers who participated in this study. The overriding concern for them has been the improvement of their instruction. Through the use of teacher-generated assessment tools, they have found how to make their teaching goals more explicit, thus providing improved instruction to their students. By using an action research model during implementation, they have reflected on their teaching practice "in action." They have emphasized the process of

learning, and in doing so, have become partners with their students in the journey toward improvement.

Part of the journey for these teachers has also been the integration of new and rigorous standards of learning. Although the standards have guided their redesigned instruction, they believe that the press to cover the standards can sometimes compromise their pedagogical goals and beliefs (Borko & Elliott, 1999). For them, sufficient time must be allowed for experimenting with redesigned instruction and reflecting upon it. To their way of thinking, how else can real change occur at the instructional level?

Finally, these teachers have learned how to generate data that have practical meaning for themselves and their students, thus contributing to their deeper wisdom about the educational enterprise (Feldman & Atkin, 1995). By using action research, they have generated convincing evidence that enables them to change their teaching practice (Neapolitan, 1997).

However, misgivings about the nature of action research by administrators and other teachers may hinder widespread effects of its use. Unless action research is implemented collaboratively by groups of teachers and is supported by school-university networks, it may not be able to hold its promise as a vehicle for improving instruction. The current emphasis on standards, assessment, and accountability, combined with financial cutbacks, could make action research a "historical curiosity" (Feldman & Atkin, 1995, p.127).

Because "a split exists between the role of teacher and the role of researcher in education" (Russo & Beyerbach, 1998, p. 62), much work has yet to be done in both university- and district-

based teacher education if action research is to hold its promise for change. First, teachers and administrators should be made aware of the benefits of action research as a professional development vehicle that, under supportive conditions, can enable teachers to exploit the potential of curriculum frameworks. By using action research in both beginning and advanced teacher education programs and in district staff development projects, teachers begin to see how action research can fit into their personal identities as teachers.

Second, teachers should be given more opportunities to share the results of their action research with the wider educational community. Not only would this disseminate knowledge about teaching and learning from a practitioner's stance, but it would also help exemplary teachers speak with confidence to the issues of standards, assessment, and accountability. Having venues for sharing research about the successes and failures of redesigned instruction could help alleviate the sense of compromise some teachers experience when using standards. It could also keep them in touch with their "moral purpose" in teaching, i.e., to make a difference (Fullan, (1982).

Third, teacher educators--both in universities and school districts--must rethink their roles in assisting teachers to reach higher expectations. Teacher educators must become facilitators, coaches, and partners with teachers. It is also important that they become advocates for teachers within the educational bureaucracy. Teacher educators should find substantive ways to work with state- and district-level administrators and policy makers in order to ensure the type of personal and professional supports teachers need in these challenging times. By doing so,

students will have a better chance of receiving the benefits of higher and more rigorous standards. And teachers will have a better chance of building a professional culture in schools.

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